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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Implementation of Sections 309(j)) PP Docket No. 93-253
of the Communications Act)
)
Competitive Bidding)

To: The Commission

COMMENTS OF GEOTEK INDUSTRIES, INC.

GEOTEK INDUSTRIES, INC.

Michael S. Hirsch
Vice President of External Affairs

1200 19th Street, N.W., Suite 607
Washington, D.C. 20036

(202)930-9305 (Corporate Headquarters)

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TABLE OF CONTENTS

SUMMARY	i
STATEMENT OF INTEREST	1
BACKGROUND	2
I. THE COMMISSION SHOULD ADOPT AN MTA MARKET DEFINITION AND ALLOW EXISTING LICENSEES TO EX- PAND THEIR SYSTEMS BEFORE ACCEPTING COMPETING APPLICATIONS FOR THE REMAINING 900 MHz CHANNELS . .	3
II. THE COMMISSION SHOULD ADOPT A PROCESS OF OPEN BIDDING FOR CHOOSING AMONG COMPETING APPLICA- TIONS	9
CONCLUSION	14

SUMMARY

By this Notice of Proposed Rulemaking ("NPRM") the Commission proposes to adopt a regulatory framework for conducting competitive bidding pursuant to Section 309(j) of the Communications Act. The Commission requests comment on, among other things, how competitive bidding may be applied to licensing the remaining 900 MHz SMR frequencies which are currently the subject of a pending rulemaking. In that rulemaking the Commission proposed to, among other things, adopt a market definition that supports development of wide-area 900 MHz SMR systems. The Commission also proposed to establish an initial eligibility criteria for certain of these frequencies recognizing that 900 MHz licensees have been prevented from expanding their coverage to meet the growing wide-area needs of their mobile customers due to the licensing structure employed in this band.

Geotek recommends that the Commission define the 900 MHz market using the Major Trading Areas ("MTAs") defined by Rand McNally, or in the alternative a proposed modified MTA market definition that represents a natural outgrowth of the Commission's initial licensing scheme for this frequency band. Further, the Commission should restrict eligibility in this band initially to existing SMR licensees to allow them to build out their systems to provide wide-area coverage. Existing licensees have, among other things, developed the infrastructure, made substantial investments, and gained operating experience in this

frequency band which will ensure that service will be introduced immediately to existing and new customers in a geographically dispersed market. In addition, it will allow these licensees to effectively compete with 800 MHz SMR licensees who, because that band is not subject to the same licensing restrictions applicable to 900 MHz, have been allowed to build out their systems to create wide-area networks. It will also allow 900 MHz licensees to compete with potential PCS licensees and cellular. Thus, allowing build out to occur prior to opening the remaining 900 MHz spectrum to competitive bidding will serve the public interest and support the goals of the auction legislation.

After existing carriers have been awarded licenses to complete build out, the remaining licenses should be subject to competitive bidding in 10-channel blocks. The Commission should use an oral bidding process to award the remaining licenses and allow carriers to aggregate up to a maximum of 80 channels in a market. Although Geotek supports aggregation, it does not support "combinatorial bidding." In addition, Geotek recommends that the Commission incorporate in its auction rules inducements for persons proposing to introduce new technologies in the 900 MHz band. The Commission has proposed to allow applicants in the 900 MHz band to apply for frequencies using "analog" technologies. Geotek supports granting preferences to persons proposing more spectrum efficient technologies such as digital frequency hopping multiple access that will expand the service options available to SMR users.

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To: The Commission

COMMENTS OF GEOTEK INDUSTRIES, INC.

Geotek Industries, Inc. ("Geotek") hereby submits its comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM") in PP Docket No. 93-253¹ proposing to adopt a framework for regulating mobile radio services pursuant to Section 309(j) of the Communications Act as amended.²

STATEMENT OF INTEREST

Through its subsidiaries, Geotek holds authorizations or has agreements to manage facilities licensed to others in 36 of the 46 Designated Filing

¹ Implementation of Sections 309(j) of the Communications Act -- Competitive Bidding, Notice of Proposed Rulemaking, PP Docket No. 93-253, FCC 93-455 (October 12, 1993).

² See Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, Title VI, § 6002(a), 107 Stat. 312, 387 (1993) (amending 47 U.S.C. § 309(j)).

Areas ("DFAs")³ in the 900 MHz frequency band of the Specialized Mobile Radio ("SMR") service. In this proceeding the Commission proposes to adopt rules for conducting competitive bidding to license, among other things, the remaining 900 MHz SMR spectrum outside the DFAs. As a SMR service provider operating in this frequency band, Geotek has a direct interest in the regulatory treatment of those frequencies.

BACKGROUND

A large segment of the 900 MHz SMR market is comprised of users with fleet dispatch needs. Dispatch users require SMR service in order to effectively and efficiently coordinate their vehicle fleets. It is imperative that all vehicles in the fleet remain in communication, wherever they are located within their operating area, which may not necessarily be coterminous with a DFA. Thus, the nature of fleet dispatch in today's market dictates the size of the service area. To effectively provide service in their markets, SMR carriers must provide both local and regional service.

The Commission has recognized that the licensing scheme utilized for 900 MHz limits SMR providers "to artificially defined markets As a result, licensees have been unable to develop the kind of wide-area services

³ DFAs largely approximate the boundaries of the Metropolitan Statistical Areas ("MSA") as defined by the Census Bureau. Although there are 50 urban centers, eight have been combined due to their close proximity.

expected by today's private radio customers." Further, these licensing constraints "have placed 900 SMR licensees at a competitive disadvantage to at least 800 MHz SMR licensees in designing and marketing their systems."⁴

In this proceeding the Commission proposes to adopt procedures for competitive bidding that may apply to licensing the remaining 900 MHz SMR frequencies outside the top 46 DFAs. To enhance competition among all wireless communication service providers, Geotek recommends that the Commission allow existing 900 MHz SMR licensees to build out wide-area systems before releasing additional licenses in this frequency band for auction. Geotek's comments in response to the NPRM are set forth below.

I. **THE COMMISSION SHOULD ADOPT AN MTA MARKET DEFINITION AND ALLOW EXISTING LICENSEES TO EXPAND THEIR SYSTEMS BEFORE ACCEPTING COMPETING APPLICATIONS FOR THE REMAINING 900 MHz CHANNELS**

Section 309(j) of the Communications Act authorizes the Commission to use competitive bidding to choose among competing applications for initial licenses.⁵ The Commission proposes to use its authority to conduct competitive bidding for the remaining 900 MHz SMR frequencies outside the top 46 DFAs

⁴ See Report and Order, 7 FCC Rcd. 4914, 4914-15 (1992).

⁵ See 47 U.S.C. § 309(j). See also NPRM, at ¶¶ 11-13.

which are currently the subject of a pending rulemaking.⁶ The NPRM seeks comment on the auction procedures that may apply to the licensing of these frequencies.

Geotek does not oppose competitive bidding for 900 MHz licenses provided that the Commission takes into account the licensing history in this and the 800 MHz SMR band and gives existing 900 MHz licensees an opportunity to build out their systems prior to accepting competing applications. To-date the licensing in the 900 MHz SMR frequency band has been restricted to the core metropolitan areas.⁷ This has prevented 900 MHz SMR providers from expanding their coverage to meet the growing wide-area needs of their mobile customers. When the Commission began licensing 900 MHz SMRs in December 1986 it contemplated opening the areas outside the DFAs in a second round of filings (Phase II) which were intended to begin immediately after all DFAs were

⁶ First Report and Order and Further Notice of Proposed Rulemaking, 8 FCC Rcd. 1469 (1993) ("Further Notice"). Geotek has filed comments and reply comments in this proceeding.

⁷ See FCC Public Notice, DA 86-173 (released, November 4, 1986).

licensed.⁸ Phase II has been delayed, however, pending the outcome of the Further Notice.⁹

In the Further Notice the Commission observed that "SMR customers [were] demanding wider-area service, and that existing 900 MHz licensees [had] been frustrated in their ability to meet those customer needs as well as develop a competitive market for their services due to our two-phased, locally-based licensing of 900 MHz systems."¹⁰ Thus, it proposed a licensing structure that would promote nationwide and regional operations.¹¹ It proposed dividing the 200 channels available in the 900 MHz band into three 20-channel blocks for the nationwide licenses, six 20-channel blocks for the regional license, and two 10-channel blocks to be licensed locally.¹²

⁸ "Phase II" refers to applications for 900 MHz SMR facilities located within a 100-mile radius of the center of each of the DFAs.

⁹ First Report and Order and Further Notice of Proposed Rulemaking, PR Docket No. 89-553, 8 FCC Rcd. 1469 (1993).

¹⁰ Further Notice, 8 FCC Rcd. at 1472.

¹¹ Further Notice, 8 FCC Rcd. at 1469. The 900 MHz SMR frequency band consists of 200 channel pairs and is currently licensed on a local basis in groups of 10 channel pairs each. See Report and Order, 2 FCC Rcd. 1825, 1831 (1986).

¹² See Further Notice, 8 FCC Rcd. at 1472-73. Although Geotek supported the Commission's proposal in that rulemaking, it suggested that the Commission adopt a channel allocation that included three 20-channel licenses for nationwide, four 20-channel regional licenses and six 10-channel local
(continued...)

The Commission also proposed to restrict eligibility for nationwide licenses initially to existing 900 MHz SMRs with an established presence and sought comment on restricting regional and local licenses to afford an opportunity for these carriers to build out their systems. The Commission concluded that restricting eligibility to existing 900 MHz SMRs would serve the public interest because such licensees had developed the infrastructure and obtained operational experience with 900 MHz equipment that would ensure rapid deployment of service to the public. Further, an initial eligibility restriction would allow existing 900 MHz SMR providers to pool their channels to achieve greater spectrum efficiency.¹³

It sought comment on several possibilities for defining the regional market, including using the "Major Trading Areas" ("MTAs") defined by Rand McNally and an alternative licensing scheme proposed by RAM Mobile Data, Inc. ("RAM") which builds on the original DFA filing concept.¹⁴ Geotek

¹²(...continued)

licenses. Geotek suggested that the revised channel plan would increase the number of licenses available to new entrants and increase competition in the market.

¹³ Further Notice, 8 FCC Rcd. at 1476.

¹⁴ Specifically, the Commission sought comment on using the seven Regional Bell Operating Company regions, MTAs, "Basic Trading Areas" ("BTAs"), Local Access and Transport Areas, or the modified MTAs proposed by RAM. Further Notice, 8 FCC Rcd. at 1473. RAM proposed a market
(continued...)

recommends that the Commission adopt the MTA market definition consistent with that established for PCS,¹⁵ or in the alternative the modified MTA proposed by RAM.¹⁶ Under either definition, Geotek supports adoption of an initial eligibility criteria to allow build out to occur prior to accepting competing applications.

Finally, the Commission proposed that all "secondary sites" be given "primary" status provided that the licensee's primary site was constructed and in operation at the conclusion of the rulemaking proceeding.¹⁷ The Com-

¹⁴(...continued)

definition that expanded the original DFAs to roughly corresponded to the 47 Major Trading Areas ("MTAs"). Within the modified MTA, 100 channels would be reserved for existing 900 MHz licenses to expand their systems into regional systems. The 100 channels would be apportioned among the existing licensees free of competing applications. The remaining channels would be available for licensing to all interested persons without restriction.

¹⁵ See Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314 (released October 22, 1993).

¹⁶ The primary difference between RAM's "modified" MTA and the Rand McNally MTA is that the modified MTA contains only one DFA per MTA. Whereas some of the MTAs defined by Rand McNally contains more than one DFA which may cause conflicts as between two existing carriers expanding to the market boundaries. Thus, the modified MTA represents a natural outgrowth of the Commission's initial licensing scheme for the 900 MHz SMR band.

¹⁷ Generally, 900 MHz SMR licensees receive interference protection for one base station transmitter within the DFA. The protected transmitter site is designated as the licensee's "primary" site. All other base stations, although
(continued...)

mission recognized that licensees had constructed secondary sites in order to provide service throughout the DFA and that these sites would likely suffer interference when licensing began for the remaining channels outside the DFAs.¹⁸

Geotek strongly recommends that the Commission designate all existing secondary sites as primary sites prior to conducting any auctions or licensing the remaining spectrum in the 900 MHz frequency band. Absent primary designation, existing carriers will receive protection at essentially only one site within the DFA. If a secondary site causes interference to a newly licensed "primary" site, it will have to be modified or taken out of service. Such a result will penalize existing licensees who have expended substantial resources to develop the 900 MHz band. Moreover, if existing carriers are required to shut down sites currently serving customers, it will virtually guarantee that some systems would no longer be economically viable.

¹⁷(...continued)

a necessary part of the SMR system, are considered "secondary" and do not receive protection.

¹⁸ See Further Notice, 8 FCC Rcd. at 1480.

II. THE COMMISSION SHOULD ADOPT A PROCESS OF OPEN BIDDING FOR CHOOSING AMONG COMPETING APPLICATIONS

The NPRM proposes to subject both the 800 MHz and 900 MHz frequencies allocated to SMR services to competitive bidding.¹⁹ The Commission requests comment on how competitive bidding should be applied to these services, and in particular, how to apply competitive bidding to the wide-area SMR systems proposed in PR Docket No. 93-144 (governing 800 MHz SMR) and the Further Notice (PR Docket No. 89-553) applicable to 900 MHz SMR.²⁰

In its comments filed in response to the Further Notice Geotek advocated for a licensing scheme that provided sufficient opportunity for existing carriers to expand their systems and make available spectrum for other potential market entrants. Geotek continues to believe that there is sufficient spectrum available in the 900 MHz SMR band to serve both goals. Thus, it recommends that existing SMR licensees should be permitted to expand their systems on frequencies outside their DFAs and that the Commission divide the remaining frequencies into 10-channel blocks and license those remaining frequencies using competitive bidding. Further, Geotek recommends that the Commission allow aggregation of channels up to 80 channels in an MTA. Such an allocation

¹⁹ See NPRM, at ¶ 138.

²⁰ NPRM, at ¶ 138 nn. 134, 135.

scheme will allow existing licensees who have made a substantial contribution to the development of the 900 MHz SMR band to build out their systems and foster competition by encouraging new and non-traditional market entrants. In addition, licensing the remaining channels in 10-channel blocks is consistent with the current licensing scheme in the 900 MHz band and would result in the least disruption to established SMR systems currently operating in the band.

Geotek recommends that the Commission use oral bidding for choosing among competing applications for new frequencies in the SMR service. Oral bidding has the advantage over other auction methods in that the ultimate price paid by the highest bidder should more accurately reflect the value of the license. In a sealed bid auction the party willing to pay the most may not submit the highest bid, since in such auctions bidders do not have the advantage of instant feedback *vis-a-vis* competing bids.²¹ Thus, in a sealed bid auction, an after market for licenses will likely develop. One could imagine a situation whereby a losing bidder would negotiate with a winning bidder immediately following the auction to purchase the license. This private after market would be contrary to the legislative intent of the amendment to the Communications Act,

²¹ While allowing bidders to submit more than one sealed bid per license with the ability to decline any bid without cost after all bids are open may help alleviate the problem of low bids, it would be cumbersome and likely result in numerous applications being filed for a single frequency. See NPRM, at ¶ 14 and n.27.

since it would result in lost revenue to the U.S. treasury and lead to license speculation.²²

Although Geotek supports allowing 900 MHz SMRs to aggregate channels, it does not support "combinatorial bidding." The NPRM proposes use of combinatorial bidding for PCS licenses using a combination of sealed and oral bidding.²³ Geotek submits that such practices would be cumbersome and hard to implement without distorting the bidding process. Further, where combinatorial bidding may work in an unoccupied spectrum such as PCS, it becomes much more complicated where there are existing licensees in the band. As proposed, the successful bidder in an oral auction would not know if its final bid was sufficient to acquire a license until after the Commission opened the sealed bids for the combined markets. The successful oral bidder may have been willing to pay more if it had had the opportunity to compete openly for the license during the oral bidding. Thus, the successful oral bidder would be forced to negotiate with the winning sealed combinatorial bidder to acquire the license -- a result contrary to the intent of the auction legislation.

Finally, consistent with the Act's clear language encouraging development of new technologies, Geotek recommends that the Commission

²² Section 309(j) requires that the Commission adopt safeguards to prevent such "unjust enrichment." See 47 U.S.C. 309(j)(4)(E).

²³ See NPRM, at ¶¶ 57-62.

incorporate in the auction rules specific inducements for persons proposing to introduce new technologies in new or existing frequency bands. The Act specifically permits the Commission to award licenses "to those persons who make significant contributions to the development of a new telecommunications service or technology" ²⁴ Further, the development and introduction of new technologies are among the stated goals of the auction process. ²⁵ In the Further Notice the Commission proposed to allow licensees to use traditional trunked analog SMR systems on the remaining 900 MHz channels. In granting Geotek's waiver to implement a new "digital frequency hopping multiple access" technology, the Commission found that Geotek's "system design [was] unique in that it [was] highly spectrum efficient." Further, that it was an "innovative, novel technology that [would] greatly expand the service options available to SMR users." ²⁶ Geotek suggests that preferences should be given to applicants proposing such new innovative digital technologies in the 900 MHz band.

Adopting an initial eligibility criteria and auctioning the remaining spectrum in 10-channel blocks is consistent with the auction legislation. The competitive bidding process is intended to promote, among other things, rapid de-

²⁴ 47 U.S.C. § 309(j)(6)(G).

²⁵ See NPRM, at ¶ 12.

²⁶ See Power Spectrum, Inc. Request for Rule Waiver, Order, DA 93-770 (released, June 28, 1993).

ployment of new technologies, products and services; spur competition; promote efficient and intensive use of the electromagnetic spectrum; and, recover a portion of the value of the spectrum.²⁷ Existing 900 MHz licensees have shown their commitment to providing service in this band by, among other things, investing in the infrastructure and business development to bring new services to mobile customers. Further, this infrastructure and experience gained in operating their SMR systems allows those licensees to expand their systems to provide immediate service to existing and new customers in a geographically dispersed market.²⁸ In addition, it would allow them to effectively compete with 800 MHz SMR licensees that have been allowed under the licensing scheme applicable to that band to build out their systems unimpeded and create wide-area networks. Thus, allowing existing 900 MHz licensees to build out their systems before subjecting this band to auctions will permit them to effectively compete with 800 MHz SMR

²⁷ See 47 U.S.C. § 309(j). See also NPRM, at ¶¶ 11-13.

²⁸ If the Commission adopts the eligibility criteria suggested by Geotek, it should allow those carriers to immediately expand their existing system upon release of the rules adopt in response to the Further Notice. The auction process should not delay service to the public on those frequencies since competing applications will not be accepted for filing.

providers and potential PCS services. Further, if cellular licenses are allowed to offer dispatch services,²⁹ 900 MHz licensees must be able to provide wide-area coverage to effectively compete. Moreover, allowing existing 900 MHz licensees to expand their systems will not significantly deplete the 200 channels available for licensing in this frequency band which would be subject to competitive bidding. Thus, allowing existing carriers to expand their systems satisfies the goals of the auction legislation and will bring new services and competition to the SMR market on an expedited basis.

CONCLUSION

For the foregoing reasons, the Commission's proposals discussed above should be adopted as modified in accordance with these Comments.

Respectfully Submitted,

GEOTEK INDUSTRIES, INC.

By: 

Michael S. Hirsch
Vice President of External Affairs

1200 19th Street, N.W., Suite 607
Washington, D.C. 20036

(201)930-9305 (Corporate Headquarters)

Dated: November 10, 1993

²⁹ See Notice of Proposed Rulemaking, GN Docket No. 93-252, FCC 93-454 (October 8, 1993) ("Regulatory Parity").